Poly-Tron Elastomeric Concrete
Installation Procedures

A. Create and Prepare Block-Out
Saw cut and demo the substrate to the dimensions desired for the area that will receive the elastomeric concrete header system. Substrate must be clean, dry to touch (<5% moisture), sound, and free of incompatible substrates such as unapproved patching materials, delaminated concrete, salt, oil, or chemical saturation, degraded steel, asphalt, bitumen, etc. If the substrate is suspicious the on-site tech rep &/or manufacturer shall be notified for recommendations prior to placement. The bottom interface of the Poly-Tron must be placed on a structural member. Any deviations from any of these instructions require manufacturer’s approval and recommendations. New concrete should be 85% cured (10-14 days for 28-day concrete) prior to application. Sandblast all surfaces against which the Poly-Tron is to be placed. Metalized steel may require only a “brush blast” to insure a clean surface. All non-metalized steel shall be blasted to SSPC-10 (near-white finish). Remove all sand and debris with oil-free compressed air. Be sure the temporary form for the joint opening is set per plans and specifications. Insure a tight fit to prevent elastomeric concrete from leaking into the joint opening. Do not use any form release agents.

*Apply Duck Tape to both outside areas of the block-out to create a neat margin during the pour and trowel portion of the installation. Remove immediately after installation is complete.

B. Primer Application
Prepare the primer by Mixing 1 Can-A & 1 Can-B without aggregate thoroughly for 30 to 60 seconds. Apply with protective gloved hand using a brush. The coated area need only be thick enough so as not to see through to the concrete substrate. DO NOT allow the primer mix to puddle in the block-out. Prime all surfaces that are to be in contact with the Poly-Tron elastomeric concrete. Place the mixed Poly-Tron elastomeric concrete immediately after priming. No waiting time is needed.

C. Elastomeric Concrete Installation
Mix Poly-Tron according to proper ratio: Mix 1 Can-A & 1-Can B for approximately 30 to 60 seconds. As you continue to mix both parts, add the supplied aggregate and mix thoroughly. All aggregate should be saturated completely with the resin mixture. Place the mixed elastomeric concrete into the prepared area per plans and specifications. Make sure that it is thoroughly compacted under any steel angles, around all anchors, re-bar, and within the block out. Trowel flush with existing deck. Working time of mixed material varies, depending on mass and temperatures. Average placement time of the Poly-Tron material is about 3-5 minutes per kit from beginning of mixing. After cure, remove temporary forms and grind a ¼” bevel to the two opposing top edges of the new Poly-Tron header system. Please view installation photos starting on page three of these instructions.

Poly-Tron will cure and can be open to traffic in the following time intervals:

- At 45-65°F (7-18°C) the cure time is approximately 3-5 ½ hours.
- At 65-80°F (18-27°C) the cure time is approximately 2-3 ½ hours.
- At 80-95°F (27-35°C) the cure time is approximately 1-2 ½ hours.
Required Equipment & Product Check List

☐ Concrete trowels - Large and small - paint thinner to clean them.

☐ An air compressor along with sand blasting equipment with air attachment to clean the joint.

☐ Bring the entire inventory that was shipped to you making sure that everything listed on the packing slip matches what you received - *(See the packing slip and instructions that were enclosed with your shipment).* KEEP ALL the product inside in a warm & dry environment! **Do not allow it to get wet or freeze!**

☐ All your foam forms to prepare the block-out.

☐ A large hand held electric power mortar mixer with 2 to 3 Universal Thin-set and Helix Mixing Paddles that fit into the mixer.

☐ Four to five mixing pales – 5 to 8-gallon clean pales - These also can be purchased from Home Depot or similar store.

☐ A large tarp to be used as a mixing station for the PolyTron. Adhere duct tape to both sides of the block-out to create a neat margin during the pour and trowel portion of the installation. Removed immediately after installation.

☐ There **CANNOT** be any rain forecasted for the installation day! The joint area must be completely dry!

☐ Please review the installation instructions to familiarize yourselves on the proper method and placement techniques for this product prior to your actual installation date. Should you require any further information or have any questions, please contact us.
Job Site Preparation

Make sure all concrete repairs are completed prior to the installation of PolyTron – Note: If concrete repairs are made with standard concrete, you must wait 10-14 days before installing PolyTron. “A Rapid-Set DOT” concrete may also be used which would allow the installation of PolyTron within 2-3 hours.

Measure the width of both sides of the Block-Out as well as the Depth to ensure you have the proper quantity of material. Make sure there is NO loose substrate.
Thoroughly sand blast and clean the entire Block-Out, then insert all joint forms.

Here is a properly cleaned and formed Block-Out, ready for the installation of the PolyTron header system.
Thoroughly mix both Part A & Part B units of primer and apply to all areas of the Block-Out in which the elastomeric concrete will be in contact with. **DO NOT** allow it to puddle in the joint block-out as this will cause the PolyTron to rise after placement.

Near the joint, set up and prepare the mixing station using a plastic tarp to prevent spillage of the material on the surrounding road surface. Next, arrange and open several units of PolyTron along with bags of aggregate as well as 5-gallon buckets. Have two people mix, 1 person pour it into the block-out, and another person to trowel the mixture flush with the road surface.
After the material is placed in the block-out, immediately begin troweling the mixture flush with the road surface.

Note the tape used to provide a neat, clean margin throughout the entire length of the joint.
Properly placed and fully cured systems

Here is a properly formed upturn. Once the form in the road is removed, there is a perfect transition into the side-walk for the installation of the sealing system.

This is a typical directional change using PolyTron elastomeric concrete.
In this example, half of the joint header system was installed in one day with the second half installed the next day utilizing a “Bevel” method. Simply bevel the one section that you will complete that day. The next day, apply the primer mixture down the bevel face and along the other half of the joint, and pour the mixed PolyTron on top of the bevel, troweling it flush with the road surface. A “Key” method may also be used. Pour the PolyTron flush one day, then the next day, simply channel out a “Key” slot into the cured section of the PolyTron, then pour the new section making sure it flows into the key hole. This will ensure that both sections will lock together.

This is a fully cured section of the PolyTron system with the Silicoflex joint sealing system installed – Note: The seal in this case is dry-fit to ensure proper fit.
This is a completely installed, fully cured section of the PolyTron elastomeric header system with the Silicoflex sealing system being installed the same day.

This is another section of a completed joint section to include the Silicoflex SF225 Seal installed and ready for road traffic.

Note the transition from one side of the road surface to the other.